2U 20-Slot Managed Chassis

IPS20

The CTC Union IPS20 is a 2U 19" rack with 20 slots for holding up to 20 interchangeable and hot-swappable CTC Union blades such as Digital Video Encoder, Decoder and Fiber Media Converter. The power modules are designed for redundant power supply capability for reliable and professional installation. The IPS20 gives flexibility, scalability, and functionality to construct a multi-task system.

Features

- 2U 19" 20 slots Chassis with AC/DC power redundancy
- Chassis mainboard consists of passive components
- All modules and cards support hot-swap function
- Support Intelligent Digital Video Server blade card
- Supports H.264 Digital Video Encoder and Decoder blade card
- Support Fiber Media Converter series product

Specifications

| Physical Specifications | Dimension | 303 x 438 x 88mm (W x D x H) |
| | Weight | 5.2kg without power supply |

Power Characteristics	AC	100 ~ 240VAC
	DC24	18 ~ 36VDC
	DC48	36 ~ 75VDC

Environmental Specifications	Operating	-10°C ~ 60°C
	Storage	-20°C ~ 70°C
	Relative humidity	10% ~ 90% non-condensing
	Predicted MTBF	75,000 hrs

| Certification | FCC class A, VCCI class A, CE, RoHS |

20 Slot Multi-service Platform

Technologies Supported:

- DVS-8501E blade Card(1-slot, 1-ch H.264 digital video encoder)
- DVS-8501E-H blade Card (2 slots, 1-ch H.264 digital video encoder with hard disk interface)
- DVS-8504E-FD blade Card (2 slots, 4-ch H.264 digital video encoder)
- DVS-8501D blade Card (1 slot, 1-ch H.264 digital video decoder)
- iDVS-01 blade Card(2 Slots Intelligent video server for Surveillance and Transportation applications)
- Fiber Media Converter series products. (Refer to FRM220 series)

Thermal fan Holes

Chassis backplane consists of passive components

Hot swappable cooling fans

Single or optional redundant power supply

1 Channel Digital Video Encoder

DVS-8501E

- H.264/ M-JPEG Video Compression
- Up to D1 resolution @ 30FPS,(NTSC) @ 25FPS (PAL)
- 1 Video in, 1 audio in/out
- 1 Digital Input/ 1 Digital Output
- 1xRS-485(DB9 interface)
- Pelco D, P PTZ Protocol

1 Channel Digital Video Encoder with H.D.D Interface

DVS-8501E-H

- Support 2.5" SATA hard-disk tray for local storage
- H.264/ M-JPEG Video Compression
- Up to D1 resolution @ 30FPS,(NTSC) @ 25FPS (PAL)
- 1 Video in, 1 audio in/out
- 1 Digital Input/ 1 Digital Output
- 1xRS-485(DB9 interface)
- Pelco D, P PTZ Protocol

1 Channel H.264 Intelligent Digital Video Encoder

iDVS-01

Video Encoder

- Multiple H.264 streams
- D1 resolution @ 30FPS(NTSC), @ 25FPS (PAL)
- 1 video in / out, 1 audio in / out
- Built-in Web server for management
- Supports HTTPS and password protection
- Supports logic (AND / OR) event alarms
- Supports two-way audio
- 1 Digital Input / 1 Digital Output

Intelligent function

- Tripwire Detection
- Intrusion Detection
- Virtual Fence Detection
- Missing Left Detection (option)
- Abandoned Objects Detection
- Video Loss Detection
- Scene change Detection (option)

1 Channel Digital Video Decoder

DVS-8501D

- Complies with H.264 compression
- Provides high quality analog video and audio decoding
- Programmable sequence mode for multiple video sources
- Decodes video source up to 64CH
- Support two-way audio

Fiber Media Converter

- Support FRM220 Fast Ethernet and Gigabit Ethernet series slide-in card
- Increase surveillance platform transmission capability
- Allow network administrators to deploy the chassis in wide range of network
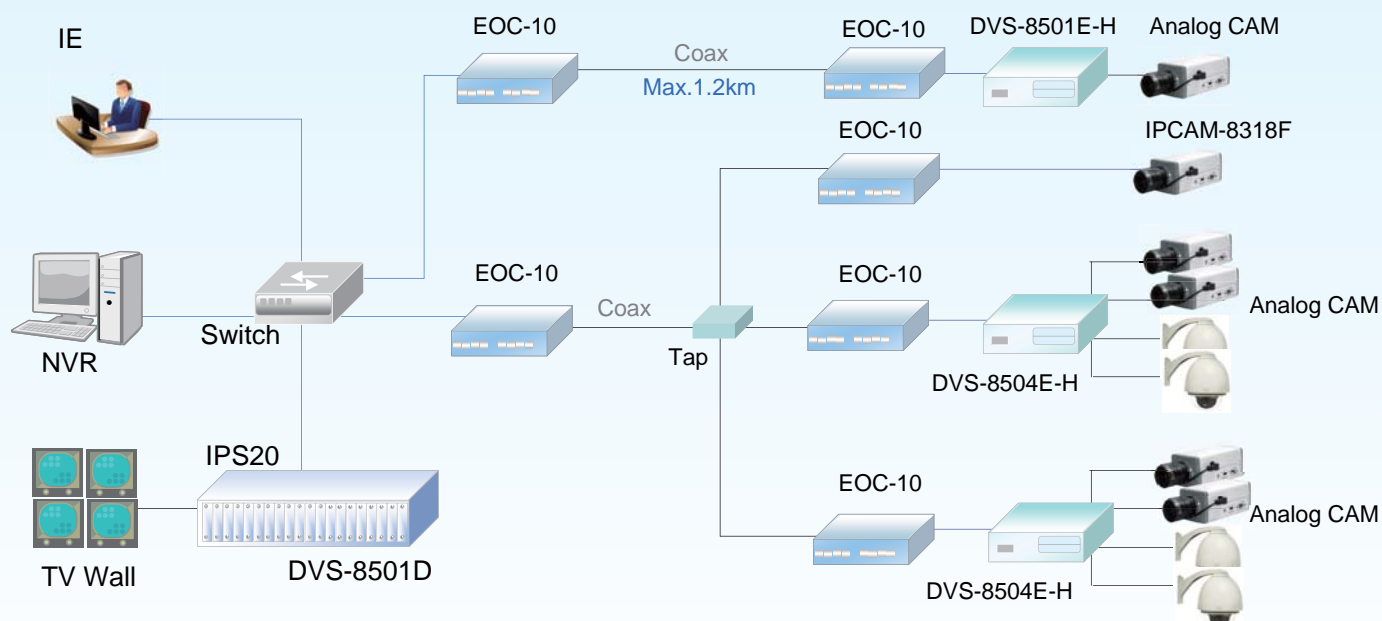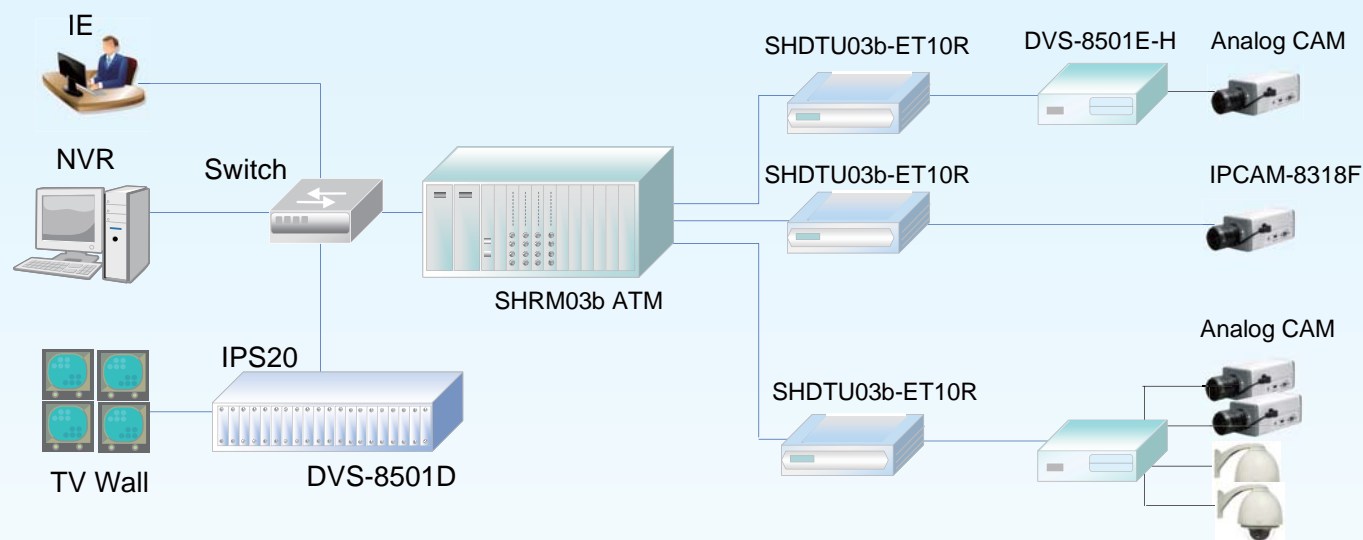- Easy to build flexible and scalable network infrastructure

8 Chassis

Ordering Information

Model Name	Type	Description
IPS20	Chassis	2U, 19" 24 ports G703 balun patch panel rack
IPS20-AC	Power	100 ~ 240VAC power supply module, IEC connector
IPS20-DC24	Power	18 ~ 36 VDC power supply module, 3 pin terminal block
IPS20-DC48	Power	36 ~ 72 VDC power supply module, 3 pin terminal block

IPS20 – ☐☐☐☐
Example: IPS20 – DC24

IP Surveillance Ethernet Fiber Ring Application

IPCAM
SPD
DVS
Analog CAM
DVS
FRM220-1000EAS

IE
FRM220-1000EAS
Fiber Ring
Switch
NVR

IPS20
DVS-8501D
TV Wall

FRM220-1000EAS

IPCAM
DVS
SPD
Analog CAM
FRM220-1000EAS

FRM220-1000EAS

IPCAM
SPD
DVS
Analog CAM

IP Surveillance Ethernet over Fiber Application

IE

NVR
Switch
FRM220

IPS20
DVS-8501D
TV Wall

FRM220-10/100

FRM220-10/100
DVS-8501E-H
Analog CAM

Max.120km

FRM220-10/100
DVS-8504E-H
Analog CAM

FRM220-10/100

FRM220-10/100
DVS-8504E-H
Analog CAM

IP Surveillance with Ethernet over Coax Application

IE

EOC-10

EOC-10   DVS-8501E-H   Analog CAM

Coax
Max.1.2km

EOC-10   IPCAM-8318F

NVR

Switch

EOC-10   Analog CAM

Coax

Tap   EOC-10

DVS-8504E-H   Analog CAM

IPS20

EOC-10   Analog CAM

TV Wall   DVS-8501D   DVS-8504E-H

IP Surveillance with G.SHDSL.bis Application

IE

SHDTU03b-ET10R   DVS-8501E-H   Analog CAM

NVR   Switch

SHDTU03b-ET10R   IPCAM-8318F

SHRM03b ATM

IPS20   Analog CAM

SHDTU03b-ET10R

TV Wall   DVS-8501D

8 Chassis

IP Surveillance Blade Card Chassis

CTC Union's IP surveillance solution is a highly efficient system based on a universal blade design. The high quality H.264 DVS (Digital Video Server) can provide full D1 resolution with 30/25 (NTSC/PAL) FPS.

DVS blades can fit in IPS series racks together with CTC Union's FRM fiber series blades to form a complete and multi-functional solution. The hot swappable blades also enable a quick replacement of internal drives for lower maintenance cost and less Mean Time To Repair.

The risk of video data loss resulting from transmission or central system error will never be a trouble again. CTC Union's DVS series provides unique and powerful local storage capability to minimize this kind of risk, thanks to CTC Union's modular blades design. Now customers can build up an IP surveillance system according to the exact channels they want. By using the 1 channel single blades design, customers have the best flexibility and scalability ever! In addition to DVS, CTC Union also provides various IP cameras for customers who intend to build up a pure IP surveillance system directly. As for the monitoring and recording tasks, CTC Union's high performance NVR (Network Video Recorder) can provide a convenience and easy-to-use platform for analyzing, distributing, and managing image data.

CTC Union is dedicated to providing our customers the most efficient way to build up a system and create value!

1- Slot H.264 Digital Video Encoder / Decoder Chassis
IPS01

The CTC Union IPS01 is a single slot rack for holding one CTC Union blades such as Digital Video Encoder and Fiber Media Converter. The built-in power module is designed for convenience and professional installation. The IPS01 gives flexibility, scalability, and functionality to make a high performance standalone.

Features :
- 1-slot chassis for encoder, decoder line cards.
- Available in six types: external power adapter or power built-in AC, DC, AC+DC, AC+AC or DC+DC.
- Fanless
- Dimensions :
  - external power 139 x 88 x 24mm (D x W x H)
  - internal power 180 x 135 x 30mm (D x W x H)

1 slot Multi-service Platform Technologies Supported
- DVS-8501E (1-slot, 1-ch H.264 digital video encoder)
- DVS-8501D blade Card (1-slot, 1-ch H.264 digital video decoder)
- Fiber Media Converter series products. (Refer to FRM220 series)

Power Input :
Power adapter

Input voltage : 100 ~ 240VAC 50/60Hz	Output voltage :12VDC 1A
AC power : 100 ~ 240VAC	DC power : 24VDC, 48VDC, 72VDC

Ordering Information

Model Name	Description
IPS01	1 Slot Chassis with 100 ~240VAC to 12VDC adpator
IPS01-AC	1 Slot Chassis with 100 ~240VAC Power
IPS01-DC	1 Slot Chassis with 18 ~75VDC Power
IPS01-AD	1 Slot Chassis with 100~240VAC + 18 ~75VDC Power

IPS01 – ☐☐

Example: IPS01 – AC

2‑Slot H.264 Digital Video Encoder / Decoder Chassis

IPS02

The CTC Union IPS02 is a 2-slot rack for holding up to 2 interchangeable and hot-swappable CTC Union blades such as Digital Video Server and Fiber Media Converter. The IPS02 gives flexibility, scalability, and functionality to make a high performance standalone device.

Features :
- 2-slot chassis for encoder, decoder line cards
- Supports either one or two single width blades or one double width blade.
- Power type: external power adapter
- Fanless
- Dimensions: 139 x 88 x 44.5mm (D x W x H)

Power Input :
Power adapter Input voltage : 100 ~ 240VAC 50/60Hz
Output voltage : 12VDC 2A

2-slot Multi-service Platform Technologies Supported
- DVS-8501E (1-slot, 1-ch H.264 digital video encoder)
- DVS-8501E-H Blade Card
  (2-slot, 1-ch H.264 digital video encoder w/hard disk)
- DVS-8504E-FD Blade Card (2-slot, 4-ch H.264 digital video encoder)
- DVS-8501D Blade Card (1-slot, 1-ch H.264 digital video decoder)
- Fiber Media Converter series products. (Refer to FRM220 series)

Ordering Information

Model Name	Description
IPS02-DC12-1	2 slot Chassis with 100 ~240VAC to 12VDC adpator(1 DC Jack)
IPS02-DC12-2	2 slot Chassis with 100 ~240VAC to 12VDC adpator(2 DC Jack)

IPS02 – ☐☐☐☐ – ☐
Example: IPS02 – DC12 – 1

4‑Slot H.264 Digital Video Encoder / Decoder Chassis

IPS04

The CTC Union IPS04 is a 4-slot rack for holding up to 4 interchangeable and hot-swappable CTC Union blades such as Digital Video Server and Fiber Media Converter. The IPS04 gives flexibility, scalability, and functionality to help construct a multi-task system.

Features :
- Four slots chassis for encoder, decoder line cards
- Supports backplane connection between four slots
- Supports one to four single width blades or two double width blades.
- Fanless
- Dimension : 162 x 87 x 88mm (D x W x H)

Power Input :
Power adapter
Input voltage : 100 ~ 240VAC 50/60Hz   Output voltage :12VDC 3A
AC power : 100 ~ 240VAC   DC power : 24VDC, 48VDC, 72VDC

4-slot Multi-service Platform Technologies Supported
- DVS-8501E (1-slot, 1-ch H.264 digital video encoder)
- DVS-8501E-H Blade Card
  2-slot, 1-ch H.264 digital video encoder   w/hard disk)
- DVS-8504E-FD Blade Card (2-slot, 4-ch H.264 digital video encoder)
- DVS-8501D Blade Card (1-slot, 1-ch H.264 digital video decoder)
- Fiber Media Converter series products. (Refer to FRM220 series)

Ordering Information

Model Name	Description
IPS04	4 slot Chassis with 100 ~240VAC to 12VDC adpator

08 Chassis
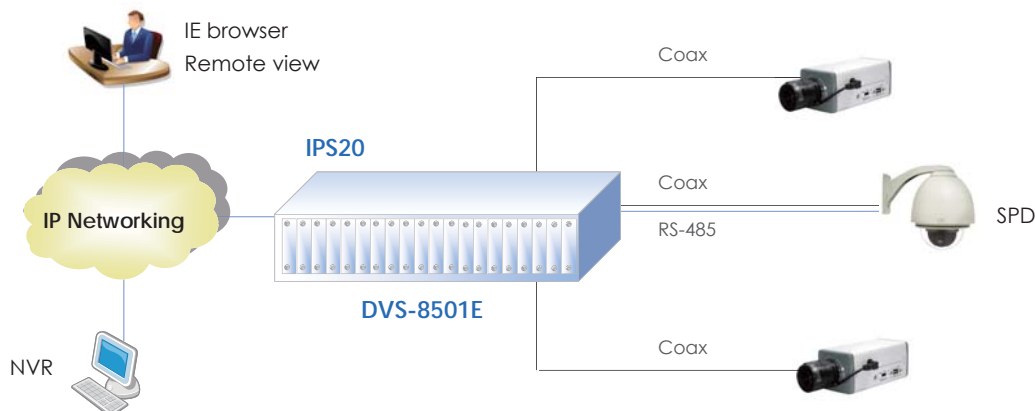
1- Ch H.264 Digital Video Encoder

DVS-8501E

CTC Union DVS-8501E Video Encoder Blade is a 1-ch video encoder provides H.264 & M-JPEG cutting edge video compression technologies. It can deliver multiple or individual configurable video streams simultaneously with full D1 resolution at 30/25 (NTSC/PAL) FPS and remote monitoring. This means that several video streams can be configured with different resolutions, frame rates and bit rate for different needs. The DVS-8501E can also provide dual-stream transmissions for recording and monitoring. The web management offers the convenience user access to detailed alarm detection and actions. When the DVS-8501E blades are used with CTC IPS series racks, this combination can effectively convert the analog security systems to high efficient performance IP based solution.

Features

- Multiple H.264 streams
- D1 resolution @ 30FPS,(NTSC) @ 25FPS (PAL)
- 1 video in, 1 audio in / out
- Built-in Web server for management
- Supports HTTPS and password protection

- Multiple H.264 streams
- D1 resolution @ 30FPS,(NTSC) @ 25FPS (PAL)
- 1 video in, 1 audio in / out
- Built-in Web server for management
- Supports HTTPS and password protection

DVS 8501E Rack Solution

IE browser
Remote view

Coax

IPS20

Coax

IP Networking

Coax
RS-485

SPD

DVS-8501E

NVR

Coax

DVS 8501E Stand-alone Solution

IE browser
Remote view

DO

Alarm

DI

Door Sensor

DVS-8501E

Coax

IP Networking

RS-485

SPD

NVR

Speaker

Microphone
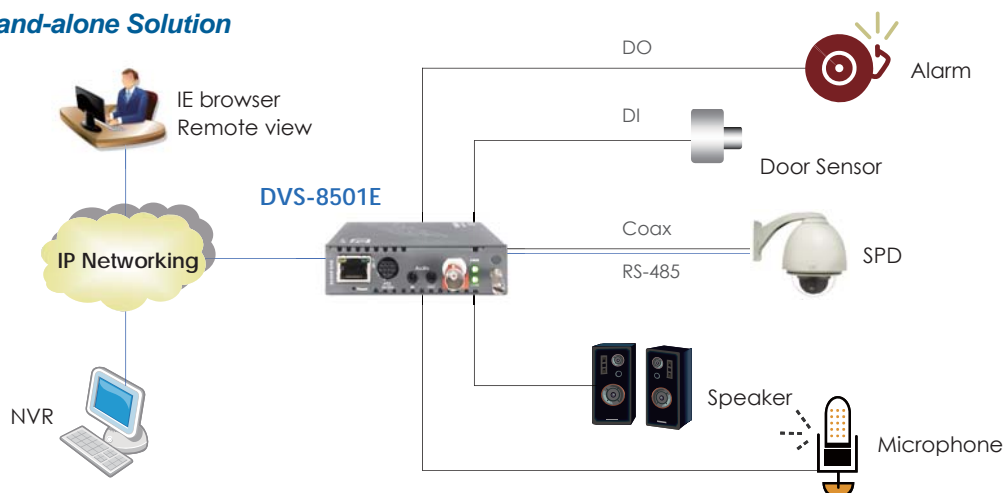
Ordering Information

Model Name	Description
DVS-8501E	1-Ch H.264 Digital Video Encoder

Specifications

Video Compression
H.264/M-JPEG

Video Stream
Main Stream, Sub stream (Main Stream to select D1 or 4CIF)
(Slave stream only to select CIF or QCIF)

Video Resolutions
D1: 720x480(NTSC)/720x576(PAL)
4CIF: 704x480(NTSC)/704x576(PAL)
2CIF: 704x240(NTSC)/704x288(PAL)
CIF: 352x240(NTSC)/352x288(PAL)
QCIF: 176x120(NTSC)/176x144(PAL)

Operating System
Embedded Linux

Video Frame Rate
1 ~ 30 FPS

Video Quality
5 levels (Medium, standard, good, detailed, excellent), Auto

Video Input
1, BNC, 75 ohm, 1 Vp-p

Network Connector
RJ-45, IEEE 802.3 10Base-T, 802.3u 100Base-TX

Network Protocols
TCP, UDP, IP, ICMP, PPPoE, ARP, UPnP, HTTP, HTTPS, FTP, SMTP, DHCP, DNS, DDNS, RTP, RTSP, NTP

Audio Inputs
1 channel audio, Microphone in

Audio Output
1 channel audio, Line out

Audio Compression
ADPCM G.711

Audio Stream
Two-way (H.264 only)

Input / Output Signal
6V p-p, +10dBm max

Input / Output Impedance
600 ohms

Terminal Block
1xRS-485 (DB9 interface), 1 alarm input, 1 alarm output

PTZ Protocol
Pelco D, P

PTZ Baud Rate
2400, 4800, 9600, 12800, 19200 Kbps

PTZ Control Speed
Pan, Tilt, Zoom, Focus, Iris

PTZ Preset
32 Preset positions

PTZ Patrol
4 Tour mode (Each mode has 10 positions)

Remote Management
Web (CGI), SNMP v1/v2c

Dimension
Line card type: 88 x 137 x 20.8mm (W x D x H)

Operating condition
-10 ~ 60 degree (Celsius)

Storage condition
-20 ~ 85 degree (Celsius)

Operating Humidity
0 ~ 95% (non-condensing)

Power Input
12VDC, 1A

System Reset
Reset button (factory default)

LED Indications
Power, LAN, video status

Motion Detection
Drag and drop configurable detection windows

Configuration Backup /Recovery
Web browser

Firmware Upgrade
Web browser

NTP
Sync with PC, Sync with NTP server, Manual

Video Adjustment
Brightness, contract, saturation, color tone level

User Account
Up to 10 user accounts for configurable

Event Action
FTP, E-mail, DO1, SMS, remote storage, PTZ preset

Event Sending Path
FTP; E-mail (forwarding JPEG picture)

Digital Zoom
4x

Snapshot
Live view mode (JPEG format)

Event Define
User define video frame rate and video resolution and video quality when alarm input and motion detection

Text Overlay
Configurable text color, background color, date/time, display position

Privacy Mask
Support 3 privacy mask window

System Language
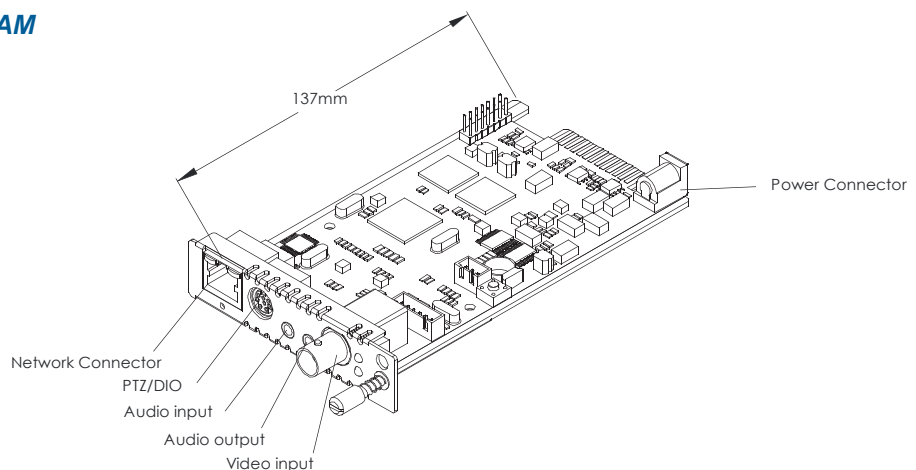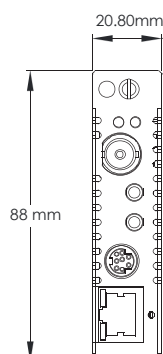English, Simplified Chinese, Traditional Chinese

Log
System log, operating log

NVR Support
CTC Union , NUUO

DIMENSION DIAGRAM

20.80mm

137mm

88 mm

Power Connector

Network Connector
PTZ/DIO
Audio input
Audio output
Video input

Digital Video Encoder

1-Ch H.264 Digital Video Encoder w/ Hard Disk
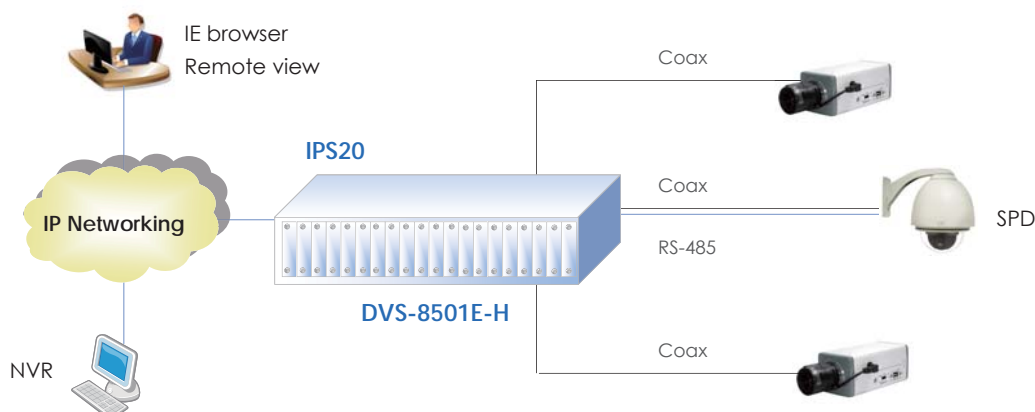
DVS-8501E-H

CTC Union DVS-8501E-H Video Encoder Blade is a 1-ch video encoder provides H.264 & M-JPEG high performance video compression technologies. It can deliver multiple or individual configurable video streams simultaneously with full D1 resolution at 30/25 (NTSC/PAL) FPS and remote monitoring. The DVS-8501E-H can also provide dual-stream transmissions for recording and monitoring. The built-in SATA interface enables powerful storage capability for the DVS-8501E-H to do the video streaming transmission and local storage at the same time. The web management offers the user convenience access to detailed alarm detection and actions. When DVS-8501E blades are used with CTC IPS series racks with various channels choices, this combination can effectively convert the analog security systems to high performance IP based solution.

Features

- Multiple H.264 streams
- D1 resolution @ 30FPS(NTSC), @ 25FPS (PAL)
- 1 video in / out, 1 audio in / out
- Built-in Web server for management
- Supports HTTPS and password protection
- Supports 2.5" SATA hard-disk tray for local storage

- Provides main and sub video streams with different resolution
- Supports logic (AND / OR) event alarms
- Supports two-way audio
- 1 Digital Input / 1 Digital Output connections
- Supports privacy mask
- Fan less design

DVS 8501E-H Rack Solution

DVS 8501E-H Stand-alone Solution
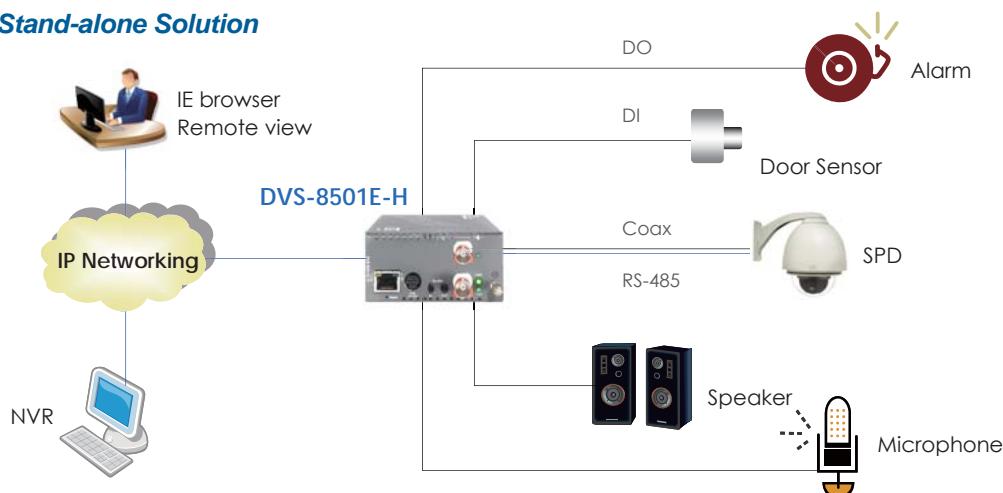
Ordering Information

Model Name	Description
DVS-8501E-H	1-Ch H.264 Digital Video Encoder with Hard Dish Interface

Specifications

Video Compression
H.264/M-JPEG

Video Stream
Main Stream, Sub stream (Main Stream to select D1 or 4CIF)
(Slave stream only to select CIF or QCIF)

Video Resolutions
D1: 720x480(NTSC)/720x576(PAL)
4CIF: 704x480(NTSC)/704x576(PAL)
2CIF: 704x240(NTSC)/704x288(PAL)
CIF: 352x240(NTSC)/352x288(PAL)
QCIF: 176x120(NTSC)/176x144(PAL)

Operating System
Embedded Linux

Video Bit Rate
32K/64K/128K/256K/384K/512K/768K/1024K/1.5M/2M

Video Frame Rate
1 ~ 30 FPS

Video Quality
5 levels (Medium, standard, good, detailed, excellent), Auto

Video Input
1, BNC, 75 ohm, 1 Vp-p

Video Output
1, BNC, 75 ohm, 1 Vp-p

Network Connector
RJ-45, IEEE 802.3 10Base-T, 802.3u 100Base-TX

Network Protocols
TCP, UDP, IP, ICMP, PPPoE, ARP, UPnP, HTTP, HTTPS, FTP, SMTP, DHCP, DNS, DDNS, RTP, RTSP, SNMP, NTP, IGMP

Audio Inputs
1 channel audio, Microphone in

Audio Output
1 channel audio, Line out

Audio Compression
ADPCM G.711

Audio Stream
Two-way (H.264 only)

Input / Output Signal
6V p-p, +10dBm max

Input / Output Impedance
600 ohms

Terminal Block
1xRS-485 (DB9 interface), 1 alarm input, 1 alarm output

PTZ Protocol
Pelco D, P

PTZ Baud Rate
2400, 4800, 9600, 12800, 19200 Kbps

PTZ Control Speed
Pan, Tilt, Zoom, Focus, Iris

PTZ Preset
32 Preset positions

PTZ Patrol
4 Tour mode (Each mode has 10 positions)

Remote Management
Web (CGI)

Dimension
Line card type: 88 x 139 x 42.1mm (W x D x H)

Operating condition
-10 ~ 60 degree (Celsius)

Storage condition
-20 ~ 85 degree (Celsius)

Operating Humidity
0 ~ 95% (non-condensing)

Power Input
12VDC, 2A

System Reset
Reset button (factory default)

LED Indications
Power, LAN, video status

Motion Detection
Drag and drop configurable detection windows

Configuration Backup /Recovery
Web browser

Local Storage
2.5" SATA HDD *1 (Hard drive is not include)

Firmware Upgrade
Web browser

NTP
Sync with PC, Sync with NTP server, Manual

Video Adjustment
Brightness, contract, saturation, color tone level

User Account
Up to 10 user accounts for configurable

Event Action
FTP, E-mail, DO1, SMS, SNMP, remote storage, PTZ preset

Event Sending Path
FTP; E-mail (forwarding JPEG picture)

Digital Zoom
4x

Snapshot
Live view mode (JPEG format)

Playback
Playback via IE browser

Event Define
User define video frame rate and video resolution and video quality when alarm input and motion detection

Text Overlay
Configurable text color, background color, date/time, display position

Privacy Mask
Support 3 privacy mask window

System Language
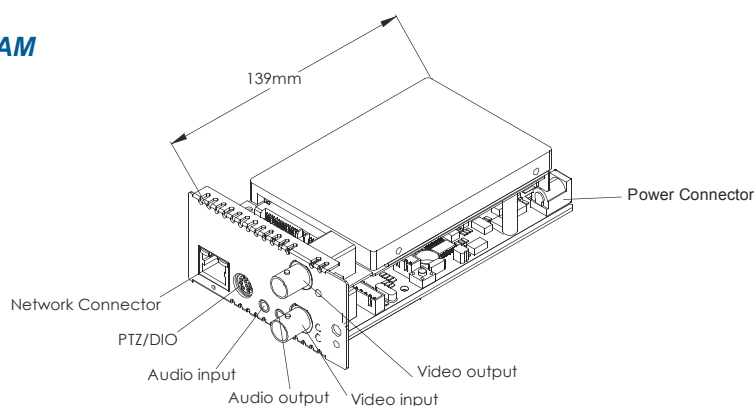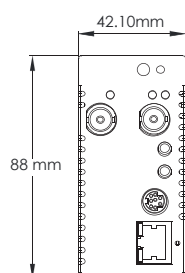English, Simplified Chinese, Traditional Chinese

Log
System log, operating log

NVR Support
CTC Union , NUUO

DIMENSION DIAGRAM

42.10mm

88 mm

139mm

Power Connector

Network Connector

PTZ/DIO

Audio input

Audio output

Video output

Video input

08 Digital Video Encoder

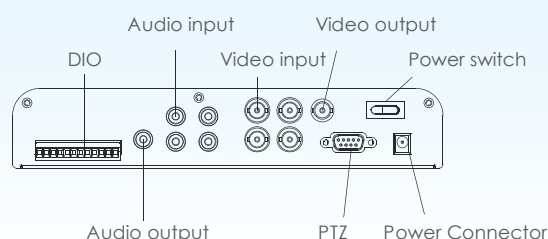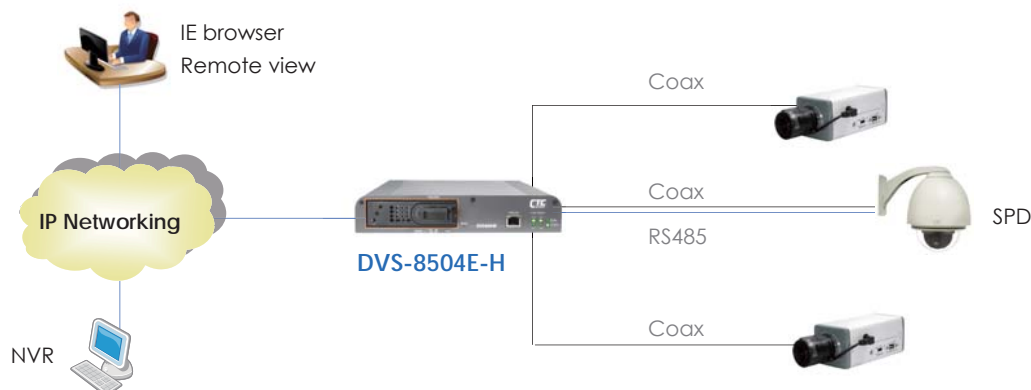## 4 - Ch H.264 Digital Video Encoder

DVS-8504E-H

CTC Union DVS-8504E-H is a standalone H.264 video encoder. It can connect up to 4 analog video cameras and transfer these streams from analog format to digital format simultaneously through H.264 video compression technology. The DVS-8504E-H provides high resolution and various video layouts from 1CH/ D1 to 4CH/ CIF and can also delivers multiple or individual configurable video streams at the same time. The DVS-8504E-H can be also provides dual-stream transmissions for recording and monitoring. The built-in SATA interface enables powerful storage capability for the DVS-8504E-H to do the video streaming transmission and local storage at the same time. The web management offers the user convenience access to detailed alarm detection and actions. CTC Union DVS-8504E-H provides an easy way to migrate the analog system to high performance IP based solution.

Features

- Multiple H.264 streams
- D1 resolution @ 30FPS, CIF resolution@120FPS
- 1-CH D1 / 2-CH 2CIF / 4-CH CIF
- Built-in Web server for management
- Supports HTTPS and password protection
- Supports 3.5" SATA hard-disk tray for local storage
- Provides main and sub video streams with different resolution
- Supports logic (AND / OR) event alarms
- Supports two-way audio
- 4 Digital Input / 2 Digital Output connections

- Supports privacy mask
- Fan less design

DVS 8504E-H CIF resolution application

DVS 8504E-H D1 resolution application
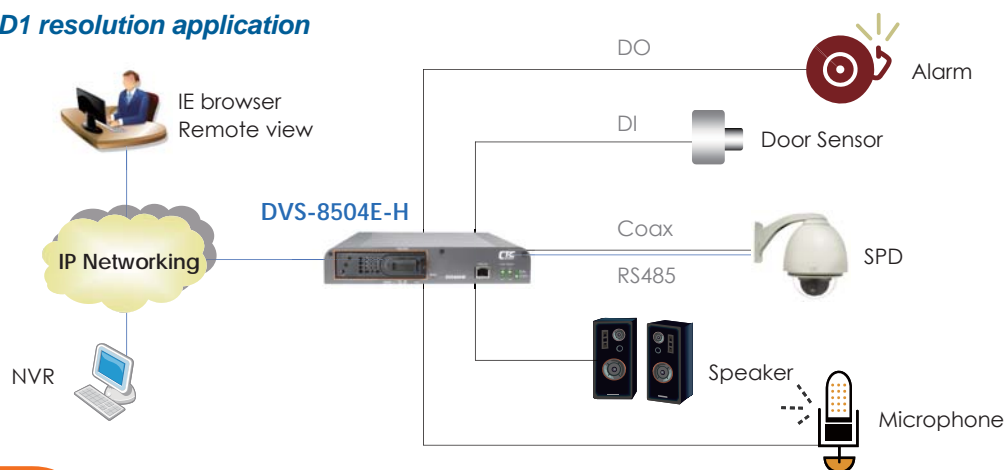
Ordering Information

Model Name	Description
DVS-8504E-H	4-Ch H.264 Digital Video Encoder with Hard Dish Interface

Specifications

Video Compression
H.264/M-JPEG

Video Stream
Main Stream, Sub stream (Main Stream to select D1 or 4CIF)
(Slave stream only to select CIF or QCIF)

Video Resolutions
D1: 720x480(NTSC)/720x576(PAL)
4CIF: 704x480(NTSC)/704x576(PAL)
2CIF: 704x240(NTSC)/704x288(PAL)
CIF: 352x240(NTSC)/352x288(PAL)
QCIF: 176x120(NTSC)/176x144(PAL)

Operating System
Embedded Linux

Video Bit Rate
32K/64K/128K/256K/384K/512K/768K/1024K/1.5M/2M

Video Frame Rate
1 ~ 30 FPS

Video Quality
5 levels (Medium, standard, good, detailed, excellent), Auto

Video Input
4, BNC, 75 ohm, 1 Vp-p

Video Output
1, BNC, 75 ohm, 1 Vp-p
(D1/4CIF supported full screen, 2CIF/CIF supported quad mode)

Network Connector
RJ-45, IEEE 802.3 10Base-T, 802.3u 100Base-TX

Network Protocols
TCP, UDP, IP, ICMP, PPPoE, ARP, UPnP, HTTP, HTTPS, FTP, SMTP, DHCP, DNS, DDNS, RTP, RTSP, SNMP, NTP

Audio Inputs
4 channels mono audio (RCA)

Audio Output
1 channel mono audio (RCA)

Audio Compression
ADPCM G.711

Audio Stream
Two-way (H.264 only)

Input / Output Signal
6V p-p, +10dBm max

Input / Output Impedance
600 ohms

Terminal Block
1xRS-485 (DB9 interface), 4 alarm input, 2 alarm output

PTZ Protocol
Pelco D, P

PTZ Baud Rate
2400, 4800, 9600, 12800, 19200 Kbps

PTZ Control Speed
Pan, Tilt, Zoom, Focus, Iris

PTZ Preset
32 Preset positions

PTZ Patrol
4 Tour mode (Each mode has 10 positions)

Remote Management
Web (CGI)

Dimension
Line card type: 238 x 257.4 x 44mm (W x D x H)

Operating condition
-10 ~ 60 degree (Celsius)

Storage condition
-20 ~ 85 degree (Celsius)

Operating Humidity
0 ~ 95% (non-condensing)

Power Input
12VDC, 2A

System Reset
Reset button (factory default)

LED Indications
Power, LAN, video status

Motion Detection
Drag and drop configurable detection windows

Configuration Backup /Recovery
Web browser

Local Storage
3.5" SATA HDD *1 (Hard drive is not include)

Firmware Upgrade
Web browser

NTP
Sync with PC, Sync with NTP server, Manual

Video Adjustment
Brightness, contract, saturation, color tone level

User Account
Up to 10 user accounts for configurable

Event Action
FTP, E-mail, DO1, DO2, SMS, SNMP, local storage, remote storage, PTZ preset

Event Sending Path
FTP; E-mail (forwarding JPEG picture)

Digital Zoom
4x

Snapshot
Live view mode (JPEG format)

Playback
Playback via IE browser

Event Define
User define video frame rate and video resolution and video quality when alarm input and motion detection

Text Overlay
Configurable text color, background color, date/time, display position

Privacy Mask
Support 1 privacy mask window

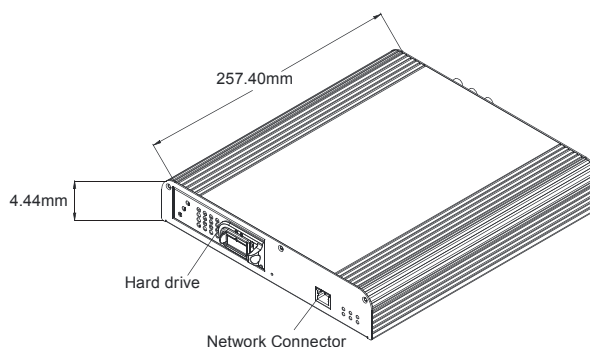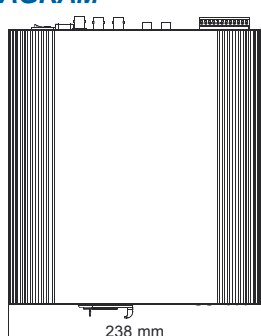**System Language**
English, Simplified Chinese, Traditional Chinese

Log
System log, operating log

NVR Support
CTC Union , NUUO

DIMENSION DIAGRAM

238 mm

257.40mm

4.44mm

Hard drive

Network Connector

OO Digital Video Encoder

1- Ch H.264 Digital Video Decoder

DVS-8501D

CTC Union DVS-8501D is a 1-ch video decoder with cutting edge H.264 video compression technology compatible with the CTC Union H.264 video encoders. It enables convert the digitalized video data back to analog format for various back-side devices such as TV wall, legacy DVR, and Joysticks. The DVS-8501D can decode video source up to 64 channels. When DVS-8501D blades are used with CTC IPS series racks with various channels choices, the DVS-8501D can become standalone type with VGA port for LCD monitor video output or rack type for professional installation in the control room.

Features

- Complies with H.264 compression technology
- Provides high quality analog video and audio decoding
- Programmable sequence mode for multiple video sources
- Decodes video source up to 64 channels
  (Sequence display mode)
- Built-in Web server for easy management
- Supports secure management and encrypted video streams
- VGA port for stand-alone type (DVS-8501DV only)
- Supports two-way audio
- Card fits in one-slot or 20-slot chassis

DVS 8501D Rack Solution
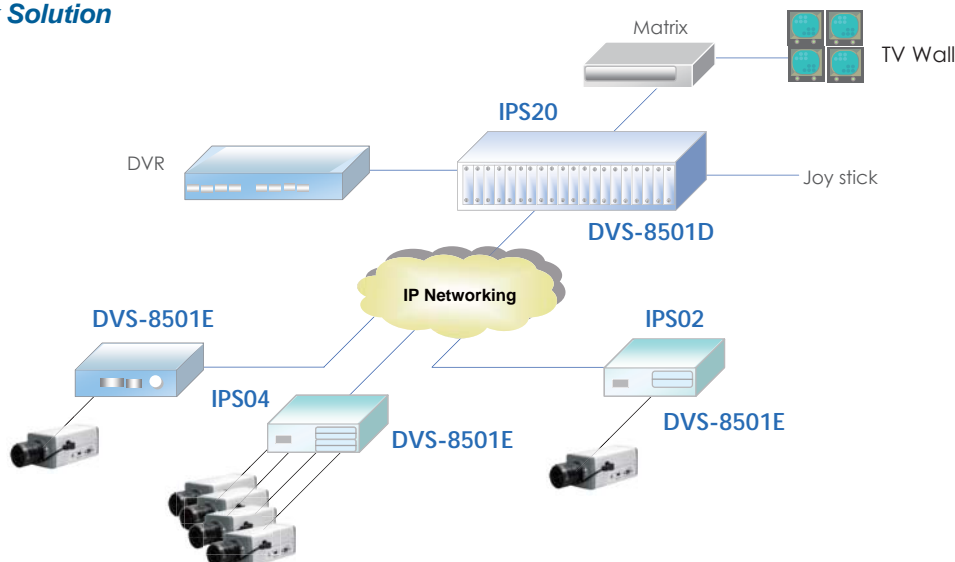
DVS 8501D Stand-alone Solution
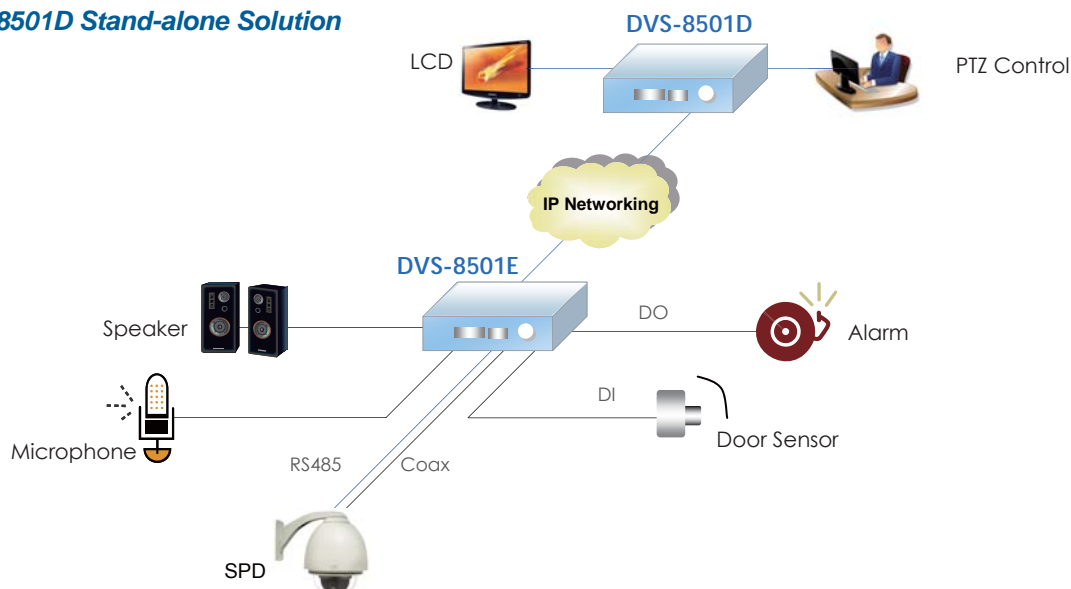
Specifications

Video Decoding
H.264 video with resolution up to D1
64 different video sources
(support manual cycling、automatic cycling)

Video Resolutions
D1 720x480(NTSC)/720x576(PAL)
4CIF: 704x480(NTSC)/704x576(PAL)
2CIF 704x240(NTSC)/704x288(PAL)
CIF 352x240(NTSC)/352x288(PAL)
QCIF 176x120(NTSC)/176x144(PAL)

Operating System
Embedded Linux

Frame rate
Frame rates up to 30 (NTSC) / 25 (PAL) in all resolution

Decoding Source
CTCU DVS-8504E-H / DVS-8501E / DVS-8501E-H / DVS-8504E-FD

Video Output
1, BNC, 75 ohm, 1 Vp-p (for DVS-8501D)
1 BNC & 1 VGA (for DVS-8501DV series product)

Output Channel
1 channel mono audio, 3.5mm phone jack

Audio Compression
ADPCM G.711

Microphone
Omni-directional

Alarm and PTZ Interface
RS-485 (DB9 Interface), 1x alarm input, 1x alarm output

Remote Management
Web (CGI)

Network Connector
RJ-45, IEEE 802.3 10Base-T, 802.3u 100Base-TX

Network Protocols
TCP, UDP, IP, ICMP, PPPoE, ARP, UPnP, HTTP, HTTPS, FTP, SMTP, DHCP, DNS, DDNS, RTP, RTSP

System Configuration
Backup and recovery all setting via web browser operation

Firmware Upgrade
Web browser

User Interface Language
English, Simplified Chinese, Traditional Chinese

Log
System log, operating log

Operating condition
-10 ~ 60 degree (Celsius)

Storage condition
-20 ~ 85 degree (Celsius)

Operating Humidity
Humidity 0 ~ 95% (non-condensing)

Power Input
12VDC, 1A

System Reset
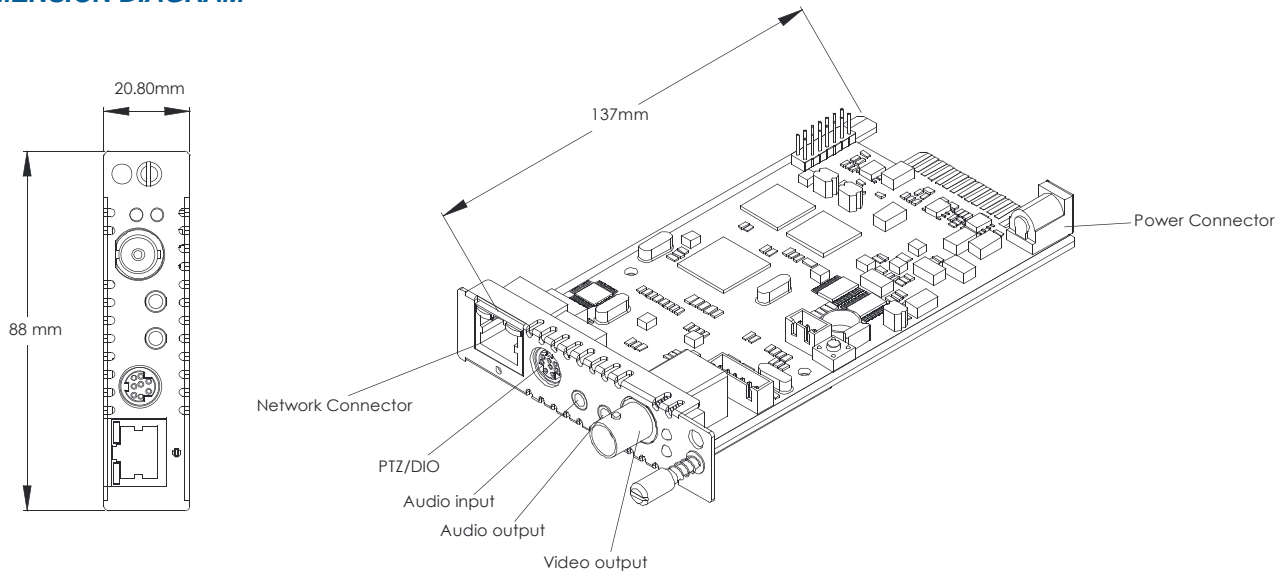Reset button (factory default)

LED Indications
Power, LAN, video status

Dimension
Line card type: 88 x 137 x 20.8mm (W x D x H)

Net Weight
Line card type: 100g

DIMENSION DIAGRAM

Ordering Information

Model Name	Description
DVS-8501D	1-Ch H.264 Digital Video Decoder
DVS-8501DV-DC	1-Ch H.264 Digital Video Decoder with VGA Connector and Internal DC power
DVS-8501DV-AC	1-Ch H.264 Digital Video Decoder with VGA Connector and Internal AC power

DVS – ☐☐☐☐
Example: DVS – 8501D

Digital Video Decoder
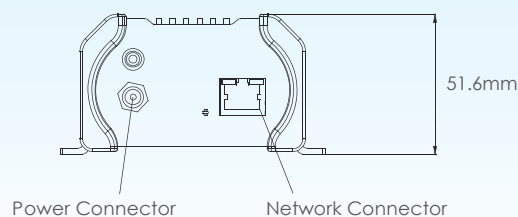
1-Ch MPEG4 Digital Video Server

DVS-8301

The DVS-8301 converts a single analog video stream to digital format. It delivers dual stream (MPEG-4 and MJPEG) @30 fps, 4CIF resolution for remote monitoring anywhere. In addition, the DVS-8301 supports 3GPP mobile protocol, which enables users to monitor via 3G cell phones or any RTSP (Real Time Streaming Protocol) compatible multimedia software on the go.
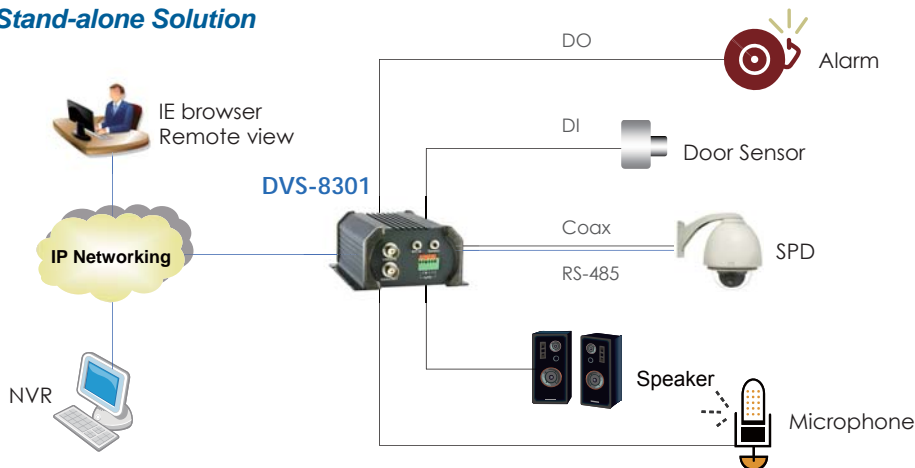
A complete set of security features includes user access management and HTTPS encryption. DVS-8301 provides one audio stream for two-way audio applications, is a PoE (Power over Ethernet) enabled unit and has powerful event management that includes image upload to FTP server, alarm notification and I/O control. Pan/Tilt/Zoom control is done over RS-485.

Features

- Simultaneous Motion-JPEG & MPEG-4 streams, up to 4CIF resolution
- Excellent image quality with up to 30 fps in all resolutions
- PoE (Power over Ethernet) enabled device
- Supports two-way audio
- Digital I/O for external alarm or sensor
- Supports 3GPP/ISMA RTSP
- Supports multiple PTZ control protocols through RS-485
- UPnP for fast and easy installation
- Bundled 16 channel surveillance software

51.6mm

Power Connector   Network Connector

DVS 8301E Stand-alone Solution

IE browser
Remote view

DVS-8301

IP Networking

NVR

DO — Alarm

DI — Door Sensor

Coax — SPD

RS-485

Speaker

Microphone

Ordering Information

Model Name	Description
DVS-8301	1-Ch MPEG4 Digital Video Encoder

Specifications

Video Input
BNC, looping, 75ohms, 1Vp-p

Video Compression
MPEG4 Simple Profile, Motion JPEG

Bit Rate
64K ~ 2Mbps

Video Adjustment
Brightness, Contrast, Hue, Saturation, Constant Bit Rate (CBR),
Variable Bit Rate (VBR)

PTZ Interface
RS-485

PTZ protocols
Pelco D/P

PTZ application
32 preset position, 4 patrol function

Processor and memory
32 Bits RISC Processor, 8MB Flash, 64MB SDRAM, Embedded Linux

LED Indications
Network, Power

Ethernet
RJ-45 10BaseT/100BaseTX PoE

Terminal Block Connector
RS-485/1 alarm input/ 1 relay output

Audio streaming
Two-way

Audio Input
3.5 mm mic/line in

Audio Output
3.5 mm line out jack

Audio compression
ADPCM 64Kbps

Alarm Trigger
External input, Motion detection

Alarm Events
Pre and post alarm buffer
File upload via FTP
Notification via email
External output activation

Network Protocol
TCP/IP, DHCP, PPPoE, ARP, ICMP, FTP, SMTP, DNS, NTP, IGMP, UPnP, RTSP,
RTP, HTTP, TCP, UDP, 3GPP/ISMA RTSP

Application Program
CTCU IP installer (Win32 Application)
16 channel recording software (SVP-Express)

Security
Password protection, HTTPS encryption, user access log

Operating Condition
0 ~ 50°C

Storage Condition
0 ~ 70°C

Operating Humidity
20 ~ 80% RH (non-condensing)

Power
12VDC, 1A

Dimension
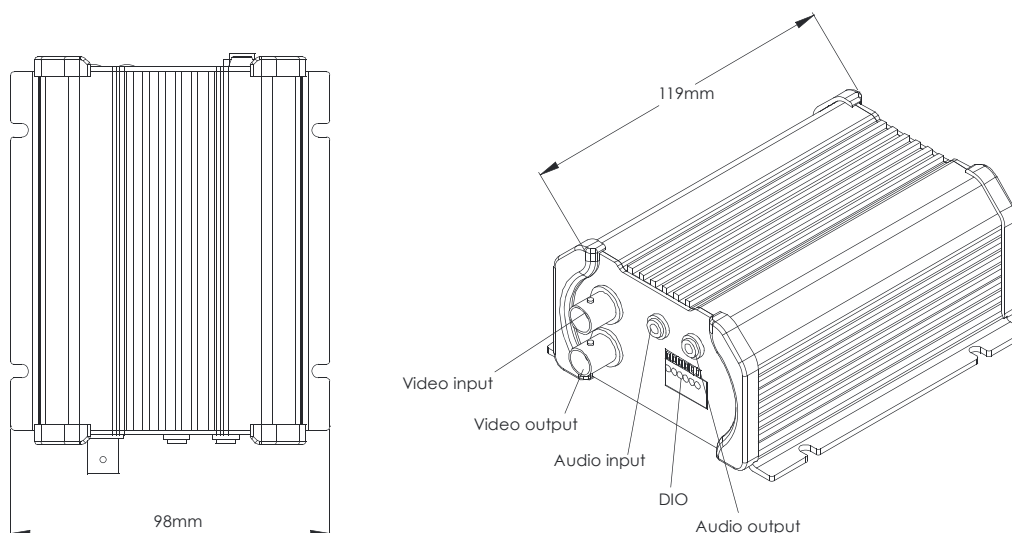119 x 98 x 51.6 mm (D x W x H)

Approvals
CE, FCC, RoHS

Include Accessories
CD with installation and management software, Power supply

NVR Support
CTC Union

DIMENSION DIAGRAM

98mm

119mm

Video input
Video output
Audio input
DIO
Audio output

Digital Video Server

1-Ch H.264 Intelligent Digital Video Encoder

iDVS-01

iDVS-01 (Intelligent Digital Video Server) not only offer highly-effective H.264 Video but also can analyze and identify at front side when the rule of alarm event were set up. Once event is triggered, iDVS-01 will transmit a video and snapshot with object frame and send alarm message to Alarm server and NVR.

Features

Video encoder
- Multiple H.264 streams
- D1 resolution @ 30FPS(NTSC), @ 25FPS (PAL)
- 1 video in / out, 1 audio in / out
- Built-in Web server for management
- Supports HTTPS and password protection
- Supports logic (AND / OR) event alarms
- Supports two-way audio
- 1 Digital Input / 1 Digital Output connections

Intelligent function
- Tripwire Detection
- Intrusion Detection
- Virtual Fence Detection
- Abandoned Objects Detection
- Video Loss Detection

Specifications

Intelligent analysis
Function
Tripwire Detection/ Intrusion Detection/ Virtual Fence Detection/ Abandoned Objects Detection/ Video Loss Detection

Video encoder
Operating System
Embedded Linux
Compression
H.264 / M-JPEG
Frame rate
30/25(NTSC/PAL) fps in all resolution
Video Stream
Multiple H.264 streams
Resolution
D1 720x480(NTSC)/720x576(PAL)
4CIF 704x480(NTSC)/704x576(PAL)
2CIF 704x240(NTSC)/704x288(PAL)
CIF 352x240(NTSC)/352x288(PAL)
QCIF 176x120(NTSC)/176x144(PAL)
Video Bit rate
32K/ 64K/ 128K/ 256K/ 384K/ 512K/ 768K/ 1024K/ 1.5M/ 2M
Video Quality
Medium / Standard / Good / Detailed / Excellent
Video Input / Output
1, BNC, 75 ohm, 1Vp-p
Image Adjustment
brightness, contrast, saturation, hue

Audio
Audio Streaming
Two way audio
Audio Compression
ADPCM G.711 (H.264)
Audio Input
1 channel Line in
Audio Output
1 channel Line out

Network
Ethernet
RJ-45, 10/100 Base-T
Remote Management
Web(CGI)
Network Protocols
RTSP, RTCP, RTP, TCP, IPV4, UDP(Unicast), HTTP, HTTPS, SMTP, NTP, DHCP, FTP, UPnP, DNS ,DDNS, ARP, PPPOE
Firmware upgrade
Web Browser
NTP
Sync with PC, Sync with NTP server, Manual

Event
DIO
1-channel DI and 1-Channel DO
Motion Detection
Drag and drop configurable detection windows
Event Action
FTP, E-mail, DO, SMS
Event Sending path
FTP, E-mail (forwarding Snapshot picture)
Event define
User define video frame rate and video resolution and quality when alarm input and motion detection

General
Operation Temperature
-10 ~ 50°C
Storage Temperature
-20 ~ 60°C
Power Source
DC12V±10%
Power Consumption
3A Max
External Dimension
Line card type: 88 x 139 x 42.1mm(W x D x H)

Intelligent Video Analytics
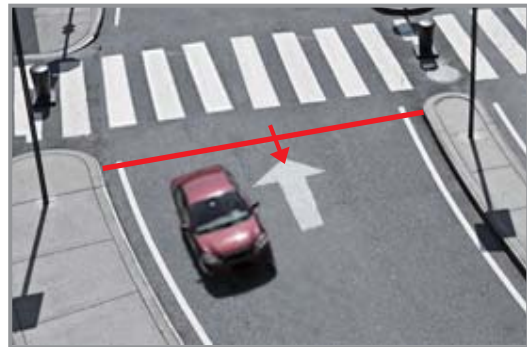
Intrusion Detection
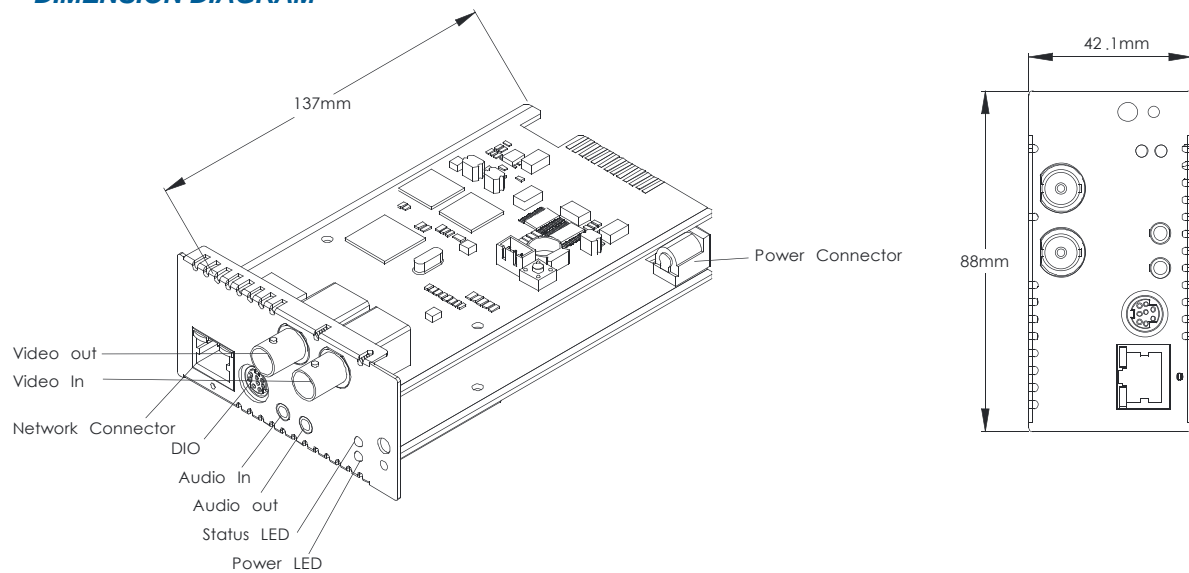

Abandoned Objects Detection

Tripwire Detection

Virtual Fence Detection

DIMENSION DIAGRAM

137mm

Power Connector

Video out
Video In
Network Connector
DIO
Audio In
Audio out
Status LED
Power LED

42.1mm

88mm

iDVS

Ordering Information

Model Name	Description
iDVS01-S	1-Ch H.264 Intelligent Digital Video Encoder